U.S. Department of the Interior Bureau of Land Management Little Snake Field Office 455 Emerson Street Craig, CO 81625

## DOCUMENTATION OF LAND USE PLAN CONFORMANCE AND NEPA ADEQUACY

NUMBER: DOI-BLM-CO-N010-2012-0066-DNA

CASEFILE/ALLOTMENT NUMBER: 0501080/04306, 04308

PROJECT NAME: Renewal of the grazing permits on the East Douglas Mountain #04306 and

Sawmill Canyon #04308 Allotments.

LEGAL DESCRIPTION: Also see allotment maps, attachments #1a & 1b.

East Douglas Mountain #04306 T.6 N., R.99 W., sections 4-6

T.6 N., R.100 W., section 1 T.7 N., R.98 W., sections 6, 7

T.7 N., R.99 W., sections 1-3, 8-24, 26-35 T.7 N., R.100 W., sections 24-26, 35, 36

T.8 N., R.98 W., section 3

T.8 N., R.99 W., sections 26, 35, 36

5,749 acres private lands

664 acres State Land Board lands

15,728 acres BLM lands

22,141 total acres

Sawmill Canyon #04308 T.6 N., R.98 W., sections 2-23

T.6 N., R.99 W., sections 1-5, 7-17, 22-27

T.7 N., R.98 W., sections 31, 32 T.7 N., R.99 W., sections 34-36

5,749 acres private lands <u>17,496</u> acres BLM lands

23,245 total acres

APPLICANT: Monty Sheridan

#### A. Describe the Proposed Action

Renew the grazing permit on the East Douglas Mountain #04306 and Sawmill Canyon #04308 Allotments for a period of three years expiring on 08/31/2015. No changes would be made to the mandatory terms and conditions of the existing authorizations. The permit would be renewed as follows:

#### Authorization #0501080

Allotment	Livestock	Dates			
Name & Number	Number & Kind	From	To	%PL	AUMs
East Douglas Mountain #04306	99 Cattle	03/14	12/31	63	601
Headquarters Pasture	3 Cattle	03/01	02/28	100	<u>36</u>
-					Total 637
Sawmill Canyon	70 Cattle	10/01	11/30	72	101
#04308	15 Cattle	12/01	12/15	72	5
				Unsch	eduled 1
					Total 106

#### **Special Terms and Conditions:**

1. Cattle or horses are authorized in the East Douglas Mountain Allotment for the Headquarters pasture.

The above permit is subject to the Standard and Common Terms and Conditions (attachment #2)

#### B. Land Use Plan (LUP) Conformance

LUP Name: Little Snake Record of Decision and Resource Management Plan (RMP)

Date Approved: October, 2011

Final RMP/EIS, August, 2010

Draft RMP/EIS, January, 2007

The Proposed Action is in conformance with the applicable LUPs because it is specifically provided for in the following LUP decisions:

The Proposed Action implements the Livestock Grazing Management Goals and Objectives on page RMP-41 of the RMP to manage resources, vegetation, and watersheds to sustain a variety of uses, including livestock grazing, and to maintain the long-term health of the

rangelands; provide for efficient management of livestock grazing allotments; and contribute to the stability and sustainability of the livestock industry. The Proposed Action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM MS 1601.03). The Proposed Action of renewal of the grazing permit is in conformance with the Little Snake Record of Decision and Approved Resource Management Plan.

Other Documents:

Colorado Public Land Health Standards and Guidelines for Livestock Grazing Date Approved: February 12, 1997

The Federal Land Policy and Management Act of 1976, as Amended (43 USC 1752)

Rangeland Reform Final Environmental Impact Statement, December 1994.

### C. Identify applicable NEPA documents and other related documents that cover the Proposed Action.

Rangeland Program Summary (RPS), Little Snake Resource Area, November 15, 1990

Standard Terms and Conditions (See Attachment 2).

Standards of Public Land Health for ????

FLPMA, Section 402 as amended (43 USC 1752).

<u>Colorado Public Land Health Standards, Decision Record & Finding of No Significant</u> Impact and Environmental Assessment, March 1997.

Environmental Assessment CO-016-LS-99-14: 4305,4306,4307,4308,4309,4304,4311 grazing permit renewal

#### D. NEPA Adequacy Criteria

1. Is the current Proposed Action substantially the same action (or is a part of that action) as previously analyzed? Is the current Proposed Action located at a site specifically analyzed in an existing document?

Yes. The public lands within the, East Douglas Mountain, Sawmill Canyon Allotments were analyzed in the RMP/EIS and were designated as "M" (Maintain) for East Douglas Mtn. Allotment and "I" (Improve) for the Sawmill Canyon Allotment. The Proposed Action received site-specific analysis in Environmental Assessment CO-016-LS-99-114. This EA analyzed grazing use that is to be continued under the Proposed Action.

### 2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the current Proposed Action, given current environmental concerns, interests, and resource values?

Yes, the multiple use alternatives analyzed in the valid NEPA documents are still appropriate. The current environmental concerns, interests, and resource values are essentially the same as those in 1998. No new alternatives have been proposed by the public to address current or additional issues or concerns.

#### 3. Is the existing analysis valid in light of any new information or circumstances?

Yes. The Proposed Action would have no disproportionate impacts on minority populations or low income communities per Executive Order (EO) 12898 and would not adversely impact migratory birds per EO 13186.

Current management of the resource conditions on the East Douglas Mountain and Sawmill Canyon Allotments meet objectives and goals. The previous analysis remains valid. No new, threatened or endangered plant or animal species have been identified on the allotments. Data reaffirms that the RMP identified all resource concerns for these allotments.

Portions of the Proposed Action occur within the Vale of Tears WSA, and the Dinosaur North LWCs.

BLM designated WSAs under the authority of the FLPMA Section 603(a) and Section 202. BLM manages WSAs under the Interim Management Policy for Lands Under Wilderness Review (H-8550-1). This management is referred to as the Interim Management Policy (IMP). The IMP provides detailed direction on management activities within WSAs including that project actions result in no irreversible or irretrievable harm to wilderness values. Livestock grazing, where already established, is permitted.

Subject to WO-IM 2011-154 and in accordance with BLM policy, the proposed project area was evaluated for suitability as lands with wilderness characteristics and met the criteria for Lands with Wilderness Characteristics. The 2012 ROD provides management objectives to protect naturalness and outstanding opportunities for primitive recreation and solitude. Therefore, the proposed action would not affect lands with wilderness characteristics.

### 4. Do the methodology and analytical approach used in the existing NEPA document(s) continue to be appropriate for the current Proposed Action?

Yes, the methodology and analytical approach used in the existing NEPA documents continue to be appropriate for the Proposed Action. Impacts to all resources were analyzed.

## 5. Are the direct and indirect impacts of the current Proposed Action substantially unchanged from those identified in the existing NEPA document(s)? Does the existing NEPA document analyze site-specific impacts related to the current Proposed Action?

Yes. Direct and indirect impacts of the Proposed Action are within the parameters of those identified in the existing NEPA documents. Impacts regarding the Proposed Action to authorize livestock grazing at the current grazing intensity and period of use are within those parameters. Monitoring data, including an allotment-specific analysis of resource conditions, supports compliance with the Colorado Public Land Health Standards. No adverse site specific impacts were identified under the Proposed Action in this analysis.

The Proposed Action would provide for at least the minimum legal requirements for cultural resources management and protection and would generally result in benefits through cultural resource data acquisition resulting from required cultural resource survey work.

Previously identified sites and new sites recorded and evaluated as eligible and/or need data sites during a Class III survey will need to be monitored. Initial recordation of new sites and reevaluation of known sites will establish the current condition of the resource and help in developing a monitoring plan for all of these sites. Some sites will have to be monitored more often than others. Sites that are found to be impacted by grazing activities will need physical protection or other mitigative measures developed (see attachment #4).

6. Can you conclude without additional analysis or information that the cumulative impacts that would result from implementation of the current Proposed Action substantially unchanged from those analyzed in the existing NEPA document(s)?

Yes. The cumulative impacts that would result from the implementation of the Proposed Action would remain unchanged from those identified in the existing NEPA documents. No additional activities have been implemented on either that would change the impacts resulting from the Proposed Action.

7. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current Proposed Action?

Yes. Extensive public outreach through scoping and involvement of the public and other agencies occurred during the development of the RMP/EIS.

#### E. Interdisciplinary Analysis:

Title	Resource	Date
Ecologist	Air Quality, Floodplains	07/31/12
	Prime/Unique Farmlands, Water	
	Quality – Surface, Wetlands/Riparian	
	Zones	
Archaeologist	Cultural Resources, Native American	08/14/12
	Concerns	
Realty Specialist	Environmental Justice	07/31/12
Environmental	Hazardous Materials	08/13/12
Coord. NEPA		
Rangeland	Invasive Non-native Species	07/31/12
Management Spec.		
Rangeland	Sensitive Plants, T&E Plant	08/02/12
Management Spec.		
Wildlife Biologist	T&E Animal	08/01/12
Geologist	Water Quality - Ground	08/03/12
Recreation	WSA, W&S Rivers	07/30/12
Specialist		
Wildlife Biologist	Animal Communities	08/01/12
Wildlife Biologist	Special Status, T&E Animal	08/01/12
Rangeland	Plant Communities	07/31/12
Management Spec		
Rangeland	Special Status, T&E Plant	08/02/12
Management Spec		
Ecologist	Riparian Systems	07/31/12
Ecologist	Water Quality	07/31/12
Ecologist	Upland Soils	07/31/12

#### **Land Health Assessment**

This action has been reviewed for conformance with the BLM's Public Land Health Standards adopted February 12, 1997. This action will not adversely affect achievement of the Public Land Health Standards.

All allotments under the Proposed Action were included in the Douglas Mountain Landscape Health Assessment (stops 16-21) in 2004. Over the entire landscape: Standard 2 (Riparian) and Standard 3 (Plant and Animal Communities and Habitats) failed during the 2004 assessment. Sites that failed in 2004 within the allotments under the Proposed Action were 16, 17, and 20.

In 2009, individual allotment land health assessments were conducted on the allotments under the Proposed Action. All sites are meeting standards or failed due to reasons other than current livestock management (see attachments #3a & 3b for details).

#### Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable
land use plan and that the NEPA documentation fully covers the Proposed Action and constitutes
BLM's compliance with the requirements of NEPA.

Signature of Lead Specialist		Date
Signature of NEPA Coordinator	Date	
		-
Signature of the Authorizing Official		Date
	Wendy Reynolds, Field Manager	

Note: The signed <u>Conclusion</u> on this document is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.

### ATTACHMENT #2 DOI-BLM-CO-N010-2012-0066-DNA TERMS AND CONDITIONS

#### **Standard Terms and Conditions**

- 1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
- 2) They are subject to cancellation, in whole or in part, at any time because of:
  - a. Noncompliance by the permittee/lessee with rules and regulations;
  - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based;
  - c. A transfer of grazing preference by the permittee/lessee to another party;
  - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described;
  - e. Repeated willful unauthorized grazing use;
  - f. Loss of qualifications to hold a permit or lease.
- 3) They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits and leases when completed.
- 4) Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
- 5) The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
- The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
- 7) Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
- 8) Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
- 9) Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

- Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
- No member of, or Delegate to, Congress or Resident Commissioner, after his/her election of appointment, or either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

#### **Common Terms and Conditions**

- A) Grazing use will not be authorized in excess of the amount of specified grazing use (AUM number) for each allotment. Numbers of livestock annually authorized in the allotment(s) may be more or less than the number listed on the permit/lease within the grazing use periods as long as the amount of specified grazing use is not exceeded.
- B) Unless there is a specific term and condition addressing utilization, the intensity of grazing use will insure that no more than 50% of the key grass species and 40% of the key browse species current years growth, by weight, is utilized at the end of the grazing season for winter allotments and the end of the growing season for allotments used during the growing season. Application of this term needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.
- C) Failure to maintain range improvements to BLM standards in accordance with signed cooperative agreements and/or range improvement permits may result in the suspension of the annual grazing authorization, cancellation of the cooperative agreement or range improvement permit, and/or the eventual cancellation of this permit/lease.
- D) Storing or feeding supplemental forage on public lands other than salt or minerals must have prior approval. Forage to be fed or stored on public lands must be certified noxious weed-free. Salt and/or other mineral supplements shall be placed at least one-quarter mile from water sources or in such a manner as to promote even livestock distribution in the allotment or pasture.
- E) Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of

human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

The operator is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any allotment activities or grazing activities, the operator is to immediately stop activities in the immediate vicinity and immediately contact the authorized officer. Within five working days the authorized officer will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places; -the mitigation measures the operator will likely have to undertake before the identified area can be used for grazing activities again.

If paleontological materials (fossils) are uncovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials and contact the authorized officer. The operator and the authorized officer will consult and determine the best options for avoiding or mitigating paleontological site damage.

- F) No hazardous materials/hazardous or solid waste/trash shall be disposed of on public lands. If a release does occur, it shall immediately be reported to this office at (970) 826-5000.
- G) The permittee/lessee shall provide reasonable administrative access across private and leased lands to the BLM and its agents for the orderly management and protection of public lands.
- H) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.
- I) The terms and conditions of this permit/lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

#### ATTACHMENT #3a DOI-BLM-CO-N010-2012-0066-DNA East Douglas Mountain Allotment #04306 Standards and Assessments

#### This allotment is meeting all standards

There were two separate site assessed within this allotment on 06/18/09, DM (Douglas Mountain) 16 & 17, by a Wildlife Biologist and Rangeland Management Specialist,. These site references continue the original site references established in the 2004 Douglas Mountain Landscape Assessment and were completed in approximately the same locations as the 2004 assessment.

STANDARD 1. Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.

This allotment has good diversity associated with slope, aspect, and elevation. There is good to moderate vigor and recruitment in all herbaceous species and shrubs. Naturally occurring stands of pinion/juniper is starting to encroach into sagebrush flats and other areas that would not be expected under a normal fire regime. There is no sign of erosion and the soils are well protected with vegetation and litter cover. This standard is met for this allotment and would continue to be met with implementation of the Proposed Action.

Name of specialist and date: Mark Lowrey, 06/18/09

STANDARD 2. Riparian systems associated with both running and standing water functions properly and has the ability to recover from major disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment and provides forage, habitat, and biodiversity. Water quality is improved or maintained. Stable soils store and release water slowly.

There are no riparian areas within this allotment, this standard does not apply.

Name of specialist and date: Mark Lowrey, 06/18/09

STANDARD 3. Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat potential. Plants and animals at both the community and population levels are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations and ecological processes.

Vegetative components include native plant species expected to occur on this allotment. Overall, vegetation composition, diversity, and production is what would be expected for this area. During the 2004 landscape assessment DM 16 failed to meet standards due to the potential

presence of the noxious weed, leafy spurge. Notes from 2004 indicate that the weed was present but not in flower so never truly identified. During the 2009 assessment there was no sign or indication of leafy spurge, there was however a large presence of a native forb from the sunflower family, genus *Senecio*. This plant was not yet in flower at the time of the 2009 assessment and at this time the ID team thought that it may have been possible that this plant, at this state of penology, may have been mistaken for leafy spurge. At site DM 17 the standard was not met in 2004 with the reasons cited as: lack of perennial grasses and an overabundance of the forb, arrowleaf balsamroot (*Balsamorhiza sagittata*). During the 2009 assessment it was determined that this site did met all standards, the overabundance of arrowleaf balsamroot was still noted but is not causing degradation to the site or the diversity, health, and vigor of other native perennials. This standard is met on this allotment for both animal and plant communities, and would continue to be met with implementation of the Proposed Action.

Name of specialist and date: Timothy Novotny, 06/18/09

STANDARD 4. Special status, threatened, and endangered species (federal and state), and other plants and animals officially designated by BLM, and their habitats are maintained or enhanced by sustaining healthy native plant and animal communities.

There are no special status species within this allotment. This standard does not apply.

Name of specialist and date: Hunter Seim, 07/21/09

STANDARD 5. The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirement set forth under State law as found in 5 CCR 1002-8, as required by Section 303 of the Clean Water Act.

There are no natural water bodies, or perennial water channels on this allotment. Surface runoff on the southern side of the allotment flows into the Yampa River, which is supporting classified uses. Surface runoff on the northern side of the allotment flows into Thompson Draw and eventually the Little Snake River, which is supporting classified uses. There is no reason to suspect any ground water impairment on this allotment. This standard is met for this allotment, and will continue to be met with implementation of the Proposed Action.

Name of specialist and date: Mark Lowrey, 06/18/09

# ATTACHMENT #3b DOI-BLM-CO-N010-2012-0066-DNA Sawmill Canyon Allotment #04308 Standards and Assessments

This allotment is meeting all standards.

STANDARD 1. Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.

This allotment has good diversity associated with slope, aspect, and elevation. There is good to moderate vigor and recruitment in all herbaceous species and shrubs. There is no sign of erosion and the soils are well protected with vegetation and litter cover. In south and south east area of the allotment, on the clayey salt desert range site, areas of some rills and gully erosion is evident but is not excessive to what would be anticipated to occur on this site. This standard is met for this allotment, and would continue to be met with implementation of the Proposed Action.

Name of specialist and date: Mark Lowrey, 06/15/09

STANDARD 2. Riparian systems associated with both running and standing water functions properly and has the ability to recover from major disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment and provides forage, habitat, and biodiversity. Water quality is improved or maintained. Stable soils store and release water slowly.

There are no riparian areas within this allotment, this standard does not apply.

Name of specialist and date: Mark Lowrey, 06/15/09

STANDARD 3. Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat potential. Plants and animals at both the community and population levels are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations and ecological processes.

Vegetative components include native plant species expected to occur on this allotment. Overall, vegetation composition, diversity, and production is what would be expected for this area. There is a small cheatgrass component occurring is isolated patches through the allotment. The health and vigor of native vegetation is preventing the spread of cheatgrass. It was observed by one ID team member that participated in the 2004 landscape assessment, that site DM 20 which did not meet standards in 2004 due to lack of perennial grasses not only met all standards in 2009, but the site looked better that the team member anticipated. This standard is being met on this

allotment for both animal and plant communities, and would continue to be met with implementation of the Proposed Action.

Name of specialist and date: Timothy Novotny, 06/15/09

STANDARD 4. Special status, threatened, and endangered species (federal and state), and other plants and animals officially designated by BLM, and their habitats are maintained or enhanced by sustaining healthy native plant and animal communities.

There are no special status species within this allotment. This standard does not apply.

Name of specialist and date: Hunter Seim, 07/21/09

STANDARD 5. The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirement set forth under State law as found in 5 CCR 1002-8, as required by Section 303 of the Clean Water Act.

There are no natural water bodies, or perennial water channels on this allotment. Surface runoff flows into the Little Snake or Yampa River, both of these water bodies are supporting classified uses. There is no reason to suspect any ground water impairment on this allotment. This standard is being met for this allotment, and would continue to be met with implementation of the Proposed Action.

Name of specialist and date: Mark Lowrey, 06/15/09

#### ATTACHMENT #4 DOI-BLM-CO-N010-2012-0066-DNA

#### East Douglas Mountain Allotment #04306/Sawmill Canyon Allotment #04308 Cultural Resources/Native American Concerns

#### **Cultural Resources**

Affected Environment: Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment was completed for the East Douglas Mountain (#4306) and Sawmill Canyon (#4308) allotments on August 14, 2012 by Ethan Morton, Little Snake Field Office Archaeologist. The assessment followed the procedures and guidance outlined by the State Director of the Colorado Bureau of Land Management in Instructional Memorandums IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM CO-20002-29. The results of the assessment are summarized below. Copies of the cultural resource assessment are on file at the Little Snake Field Office.

The prehistoric and historic cultural context for northwestern Colorado has been described in several recent regional contexts. Reed and Metcalf's (1999) context for the Northern Colorado River Basin is applicable for the prehistoric context and historical contexts include overviews compiled by Frederic J. Athearn (1982) and Michael B. Husband (1984). A historical archaeology context has also been prepared for the state of Colorado by Church and others (2007). In addition, significant cultural resources administered by the BLM-LSFO have been discussed in a Class 1 overview (McDonald and Metcalf 2006) and valuable contextual information is available in synthesis reports of archaeological investigations for a series of large pipelines in the area (Metcalf and Reed 2011; Rhode and others 2010; Reed and Metcalf 2009).

Data developed here was taken from the cultural program project report files, site report files, and atlases kept at the Little Snake Field Office. Electronic files were also accessed at the Colorado Office of Archaeology and Historic Preservation through the on-line Compass database system. Government Land Office (GLO) plat maps, patent records, and United State Geological Survey (USGS) 1:24,000 scale topographical maps were also reviewed for potential undocumented historic resources.

The table below is based on an analysis developed for the specific allotment in this EA. The table shows known cultural resources, eligible and need data, and those that are anticipated to be in each allotment.

Allotment	Acres	Acres	Percent of	Eligible or	Estimated	Estimated
Number	Surveyed	NOT	Allotment	Need Data	Sites for the	Eligible or
(BLM acres)	at a Class	Surveyed	Inventoried	Sites-	Allotment	Need Data
	III Level	at a Class	at a Class	Known in	*(total	Sites in the
		III Level	III Level	Allotment	number)	Allotment
						(number)
4306(15,728)	19	15,709	<1%	0	550	315
4308(17,496)	128	17,368	<1%	2	612	350

<sup>\*</sup>Estimates of site densities are based on known inventory data. Estimates should be accepted as baseline figures

#### East Douglas Mountain Allotment (#4306)

Four cultural resource studies have been conducted within the East Douglas Mountain Allotment. Three of these studies were related to energy development in the northeastern corner of the allotment and the fourth study was related to a range improvement project in the southeastern corner of the allotment. Approximately 18 acres (less than 1 percent) have been inventoried for cultural resources on BLM-LSFO administered lands within the allotment. No cultural resources have been identified within the allotment as a result of these studies. An examination of the 1908 and 1910 GLO plats indicated the potential for undocumented historic resources consisting of "Indian Graves" and four historic roads.

Due to the lack of inventory within the allotment it is difficult to estimate the numbers and locations of undiscovered cultural resources. However the proximity to the Yampa and Little Snake rivers as well as the resources available on Douglas Mountain suggests that this area would have been very attractive to the aboriginal and historic inhabitants of the region. Based on available data (nearby site density) it is likely that there are approximately 550 undocumented cultural resources on BLM-LSFO administered land within the allotment. It is estimated that approximately 315 of these resources will be recommended or determined eligible for the National Register (Historic Properties). Subsequent cultural resource inventory will be conducted in areas where livestock concentrate within ten years of issuance of a permit. This subsequent inventory will consist of approximately 190 acres and will also involve the evaluation of the potential historic resources identified on the GLO plat. If archaeological or historic sites potentially eligible for the National Register are identified during the subsequent field inventory, and BLM-LSFO determines that grazing activities are adversely impacting the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer (SHPO).

#### Sawmill Canyon Allotment (#4308)

Five cultural resource studies have been conducted within the Sawmill Canyon Allotment. Three of these studies were conducted for range improvement projects, one for a geoseismic exploration, and one related to an inventory of cultural resources within or near Dinosaur National Monument (DNM). All of these surveys were relatively small in size and scattered besides the study for DNM which was undertaken in the southwest corner of the allotment. Approximately 128 acres (less than 1 percent) have been inventoried for cultural resources on BLM-LSFO administered lands within the allotment. These inventories resulted in the discovery of ten cultural resources. These cultural resources consist of aboriginal open lithic scatters (3) and isolated finds (8). Two of the isolated finds are associated with the Archaic Era and the one of the isolated finds is associated with the Protohistoric Era. Two of the lithic scatters (5MF.1979 and 5MF.2114) have the potential to be eligible for the National Register but require additional data before recommendations can be made. Both of these sites have been subjected to disturbances and may have to be mitigated. An examination of the 1907 and 1908 GLO plats indicated the potential for undocumented historic resources consisting of a "Ditch", three historic roads, a fenced pasture, and a fenceline.

Due to the lack of inventory within the allotment it is difficult to estimate the numbers and locations of undiscovered cultural resources. However the proximity to the Yampa and Little Snake rivers as well as the resources available on Cross Mountain suggests that this area would have been very attractive to the aboriginal and historic inhabitants of the region. Based on available data (nearby site density) it is likely that there are approximately 612 undocumented cultural resources on BLM-LSFO administered land within the allotment. It is estimated that approximately 350 of these resources will be recommended or determined eligible for the National Register (Historic Properties). Subsequent cultural resource inventory will be conducted in areas where livestock concentrate within ten years of issuance of a permit. This subsequent inventory will consist of approximately 360 acres and will also involve the evaluation of the potential historic resources identified on the GLO plats. If archaeological or historic sites potentially eligible for the National Register are identified during the subsequent field inventory, and BLM-LSFO determines that grazing activities are adversely impacting the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer (SHPO).

Environmental Consequences, Proposed Action: The direct impacts to Historic Properties where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art (Broadhead 2001, Osbourn et al. 1987). Indirect impacts from where livestock concentrate include soil erosion, gullying, and increased potential for unlawful collection of artifacts and vandalism of cultural resources. Other indirect impacts can include detracting from the integrity of setting and feeling for nearby Historic Properties within the viewshed of livestock concentration areas.

Mitigation Measures, Proposed Action: No known adverse impacts from livestock have been documented at the two cultural resources which are potentially eligible for the National Register. These sites should be revisited and evaluated as to any adverse impacts from livestock. Continued livestock use of the area is appropriate, as long as any identified adverse effects are mitigated. If BLM LSFO determines that livestock are having an adverse effect to historic properties mitigation measures will be developed such that livestock will have no effect to historic properties. If a no effect evaluation cannot be reached, specific mitigation will be developed in consultation with SHPO. In addition, the location marked "Indian Graves" within the East Douglas Mountain Allotment should be visited to assess if any Native American remains are present. If any remains are identified consultation will be initiated with the tribes to ensure compliance with the Native American Graves and Repatriation Act.

Environmental Consequences, No Grazing Alternative: While a no grazing alternative alleviates potential damage from livestock activities, cultural resources are constantly being subjected to site formation processes or events after creation (Binford 1981, Schiffer 1987). These processes can be both cultural and natural and take place in an instant or over thousands of years. Cultural processes include any activities directly or indirectly caused by humans. Natural processes include chemical, physical, and biological processes of the natural environment that impinge and or modify cultural materials. Sites which have been determined eligible for the National Register and are threatened may have to be mitigated.

Environmental Consequences, Cumulative Impacts: The cumulative impacts to Historic Properties are confined to the allotment, lands adjacent to the allotment, and land within the view shed of the allotment. The region has been historically used for livestock for over fifty years. The intensity of livestock grazing has generally decreased over time. Any Historic Property that has the potential to be adversely impacted by the present proposed actions was likely adversely impacted to a greater degree during the past when livestock use was more intensive. While continued livestock use may not directly impact areas where prior intensive use was present, secondary effects such as increased erosion may cause long term irreversible effects to Historic Properties if present. The presence of livestock has increased ground visibility and decreased erosion exposing deposits that would otherwise be obscured by vegetation or remain buried. The installation of range improvements and placement of mineral supplements has caused additional ground disturbances over time. Maintenance of roads and the removal and or replacement of range improvements have likely resulted in the obliteration of historic properties. Continued livestock use may cause substantial additional ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties if present.

#### References

Athearn, Frederic J.

1982 An Isolated Empire: A History of Northwest Colorado. Bureau of Land Management-Colorado. Cultural Resource Series No. 2, Second Edition. Denver.

Binford, Lewis R.

Behavioral archaeology and the "Pompeii Premise". Journal of Anthropological Research 37(3):195-208.

Church, Minette C., Steven G. Baker, Bonnie J. Clark, Richard f. Carrillo, Jonathan C. Horn,

Carl D. Spath, David R. Guilfoyle, and E. Steve Cassells

2007 *Colorado History: A Context for Historical Archaeology*. Colorado Council of Professional Archaeologists, Denver.

Husband, Michael B.

1984 Plateau Country Historic Context. Office of Archaeology and Historic Preservation, State Historic Preservation Office, Denver.

Metcalf, Michael D and Aland D. Reed

2011 Synthesis of Archaeological Data Compiled for The Piceance Basin Expansion, Rockies Express Pipeline, and Uinta Basin Lateral Projects Moffat and Rio Blanco Counties, Colorado and Sweetwater County, Wyoming. Volume 2. Metcalf Archaeological Consultants, Eagle, CO.

McDonald Kae and Michael Metcalf

2006 Regional Class I Overview of Cultural Resources for the BLM Little Snake Field Office. Metcalf Archaeological Consultants, Inc. Eagle, Colorado.

Reed, Alan D. and Michael Metcalf

1999 Colorado Prehistory: A Context for the Northern Colorado River Basin. Colorado Council of Professional Archaeologists, Denver, Colorado.

2009 Synthesis of Archaeological Data Compiled for The Piceance Basin Expansion, Rockies Express Pipeline, and Uinta Basin Lateral Projects Moffat and Rio Blanco Counties, Colorado and Sweetwater County, Wyoming. Volume 1. Alpine Archaeological Consultants, Inc, Montrose, CO.

Rhode, David, Lisbeth A. Louderback, David Madsen, and Michael D. Metcalf

2010 Synthesis of Archaeological Data Compiled for The Piceance Basin Expansion, Rockies Express Pipeline, and Uinta Basin Lateral Projects Moffat and Rio Blanco Counties, Colorado and Sweetwater County, Wyoming. Volume 3. Metcalf Archaeological Consultants, Eagle, CO.

Schiffer, Michael B.

1987 Formation Processes of the Archaeological Record. Formation Processes of the Archaeological Record. Albuquerque: University of New Mexico Press.

#### **Native American Religious Concerns**

**Affected Environment:** Four Native American tribes have cultural and historical ties to lands have administered by the BLM LSFO. These tribes include the Eastern Shoshone Tribe, Ute Mountain Ute Tribe, Uinta and Ouray Agency Ute Indian Tribe, and the Southern Ute Indian Tribe.

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act, the Native American Graves Environmental Assessment Protection and Repatriation Act, and Executive Order 13007 (Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and Archaeological Resources Protection Act, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to "historic properties" and "archaeological resources". In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

Consultations for grazing permit renewals are consulted on annually with the tribes. Letters were sent to the tribes in the spring of 2012 describing general livestock permitting. No comments were received. Specific range permits are generally not consulted with the tribes unless they rise to a level that warrants specific consultation. The location of any specific range permit has likely not undergone an evaluation regarding the presence of items, sites, or landscapes which may be significant to the tribes.

Environmental Consequences, Alternative-Proposed Action: Cultural items, sites, or landscapes determined to by culturally significant to the tribes can be directly or indirectly adversely impacted by livestock grazing. Direct impacts could include but are not limited to physical damage, removal of cultural objects or items, and activities thought to be disrespectful. Indirect impacts include but are not limited to prevention of access (hindering the performance of traditional ceremonies and rituals), increased visitation of a previously little used area, and loss of integrity related to religious feelings and associations.

There are no known cultural items, sites, or landscapes determined to be culturally significant to the tribes within and near the undertaking area. The proposed action does not prevent access to

any known sacred sites, prevent the possession of sacred objects, or interfere or otherwise hinder the performance of traditional ceremonies and rituals.

Mitigation Measures, Alternative A-Proposed Action: There are no known adverse impacts to any cultural items, sites, or landscaped determined to by culturally significant to the tribes. The location marked "Indian Graves" within the East Douglas Mountain Allotment will be visited and evaluated by the BLM-LSFO archaeologist. If any cultural items or sites are identified consultation will be initiated with the tribes. If new information is provided by Native Americans, additional or edited terms and conditions for mitigation may have to be negotiated or enforced to protect resource values.

#### Environmental Consequences, No Grazing Alternative: None

**Environmental Consequences-Cumulative Impacts:** Continued use of the area by livestock had an additive effect of changing the landscape from that known by the tribes. There are no specific sites of concern identified in the project area; it is rather the broader continued change that modern culture brings to the landscape.